

**Table S1.** Confusion matrix of LCZ classification maps for Fuzhou central urban area, 2013.

[illegible]

**Table S2.** Confusion matrix of LCZ classification maps for Fuzhou central urban area, 2016.

[illegible]

**Table S3.** Confusion matrix of LCZ classification maps for Fuzhou central urban area, 2021.

LCZ	1	2	3	4	5	6	7	8	9	10	A	B	C	D	E	F	G	UA (%)	PA (%)
1	24	2	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	100.00	33.33
2	3	19	0	9	1	0	0	0	0	0	0	0	0	1	0	0	0	12.50	100.00
3	0	0	8	6	0	0	2	0	0	1	0	0	0	0	1	0	0	55.56	20.83
4	2	1	2	54	0	0	0	0	0	0	0	0	0	1	0	0	0	100.00	20.00
5	0	0	0	17	29	3	0	0	0	0	0	0	0	0	0	0	0	18.75	30.00
6	0	1	0	4	2	8	0	0	0	0	0	0	0	0	0	0	0	38.46	29.41
7	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	100.00	100.00
8	1	0	1	1	0	0	0	76	0	0	0	0	0	0	4	0	0	100.00	95.45
9	0	0	0	0	0	0	0	0	35	0	0	0	0	0	0	0	0	25.00	1.16
10	2	0	1	2	0	0	0	19	0	4	0	0	0	14	1	0	0	50.00	100.00
A	0	0	0	0	0	0	0	0	0	0	43	0	1	0	0	0	0	68.62	88.17
B	0	0	0	0	0	0	0	0	9	0	11	6	1	0	0	9	0	60.71	86.08
C	0	0	0	1	1	0	0	0	11	0	25	1	22	7	0	15	0	73.53	80.65
D	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	92.19	99.16
E	1	0	0	0	0	0	0	0	3	0	0	0	0	0	8	12	0	100.00	40.00
F	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	40	18	100.00	10.00
G	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	86	100.00	100.00
OA=66.20%										Kappa=0.6336									

**Table S4.** Comparison of the temperature of sample points in the study area with the inversion temperature (unit: °C).

Serial No.	Site/Measurement point	2013		2016		2021	
		T <sub>a</sub>	LST	T <sub>a</sub>	LST	T <sub>a</sub>	LST
1	Wushan weather station	41.68	41.05	47.68	48.05	42.91	43.85
2	Daming Food Street	42.92	43.56	47.92	48.56	44.65	45.54
3	Zuohai Park	40.02	40.26	40.92	41.26	38.95	39.59
4	Gushan Mountain	38.10	38.92	39.05	39.90	39.01	39.49
5	Fujian Normal University (Cangshan)	41.91	41.82	42.91	43.82	43.15	44.20

Note: T<sub>a</sub> indicates atmospheric temperature.